

35

cobalt,  
chromium,  
alumina,  
zirconia,  
silicon carbide,  
silicon nitride,  
stainless steel,  
PEEK,  
Delrin,  
diamond, or  
diamond-like material.

19. A unitary disc implant adapted for placement between adjacent vertebral surfaces of a spinal joint comprising:

a rigid interbody device having no moving components;  
a first polished, generally spherical articular bearing surface;

a second polished, generally spherical articular bearing surface;

a first protrusion centered about a central axis on the first bearing surface configured to penetrate a central portion of a first adjacent vertebral surface when the implant is positioned between vertebrae; and

a second protrusion centered about the central axis on the second bearing surface configured to penetrate a central portion of a second adjacent vertebral surface when the implant is positioned between vertebrae;

wherein the first protrusion and second protrusion are adapted to promote rotation and restore near-normal motion between the interbody device and the first and second adjacent surfaces.

36

20. A unitary disc implant adapted for placement between adjacent vertebral surfaces of a spinal joint comprising:

a rigid interbody device having no moving components;

a first generally spherical articular bearing surface; and  
a second generally spherical bearing surface;

a first protrusion on the first bearing surface centered about a central axis of the intervertebral body configured to penetrate a central portion of the first adjacent vertebral surface when the implant is positioned between vertebrae and adapted to promote rotation and restore near-normal motion between the interbody device and the first adjacent surface;

at least a second protrusion on the second bearing surface configured to penetrate the endplate of the second adjacent vertebral surface when the implant is positioned between vertebrae; and

a surface texture on the second bearing surface;

wherein the first and second bearing surfaces are generally spherical and configured to conform to the geometry of first and second adjacent vertebral joint surfaces, and

wherein the at least second protrusion and the surface texture on the second bearing surface are adapted to prevent movement between the second bearing surface and the second adjacent surface and configured to promote fibrous tissue on-growth, fibrous tissue ingrowth bone on-growth or bone ingrowth.

\* \* \* \* \*